

***Rana tagoi yakushimensis* n. Subsp.**  
**from Yakushima, Kagoshima Prefecture, Japan**

(with one plate and six textfigures)

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Type locality: River Anbo, Yakushima, Kagoshima Prefecture.

Description: Head somewhat narrower; snout rather obtusely pointed; the distance from snout to the anterior margin of eye narrower than the interorbital space; loreal region slightly concave on the surface; internasal space somewhat broader than the interorbital space; nostril nearer the end of snout than  $\frac{2}{3}$  or more the distance from snout to the anterior margin of eye; the width of upper eyelid equal to the interorbital space or somewhat larger; tympanum round in outline, its diameter about half of an eye; vomerine teeth elliptical, present in two oblique anteriorly closed series, beginning close to the anterior border of the choanae; vocal sac small, on each side, below the angle of the mouth; the dorso-lateral fold indistinct, not curved at the posterodorsal side of tympanum, somewhat curving to the median line and then curved outwards; indistinct on thigh and ended at the base of the hind-limb.

Fore-limb well-developed; the first finger longer than the second; the third longest; the pad-like swelling two, large, grey in color, with minute tubercles on the surface.

Hind-limb well-developed; heels well overlapping when they are folded at right angles to the body; tibia big; the length of tibia and femur somewhat longer than the distance from the outer nostril to anus; the inner metatarsal tubercle somewhat rounded; the outer metatarsal tubercle very small, indistinct.

Coloration: In life, brown or dark brown, with blackish brown or black distinct patterns on the entire surface of back and somewhat distinct on the sides of body; chevron mark very distinct; from the top of snout to canthus rostralis margined with black line; brown or black spots scattered on the space of labials; the black pattern from the posterior margin of tympanum to the base of fore-limb somewhat narrower; the outer margin of limbs provided with many black and brown spots extending to the belly; black or blackish brown cross-bars on the fore and hind limbs; dark spots on the thigh, making network; the ventral surface of body light yellowish white or greyish white, with dark brownish pigments, extending under throat to belly.

Skeleton: Omosternum small, crescentic; xiphisternum crescentic, without invagination on the middle of lower margin.

Habits: The present subspecies is found in a shadowy station along the River

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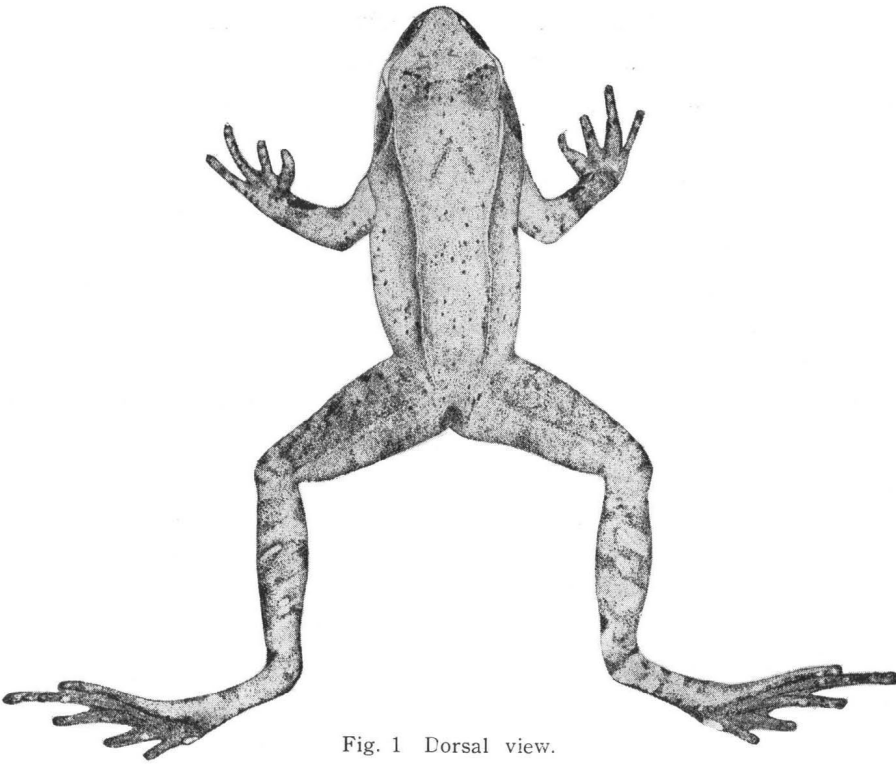


Fig. 1 Dorsal view.

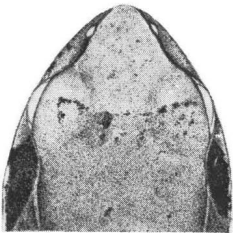


Fig. 2 Dorsal view of head.

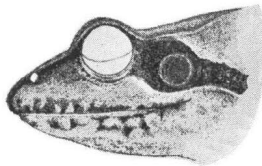


Fig. 3 Lateral view of head.



Fig. 4 Fore-limb.

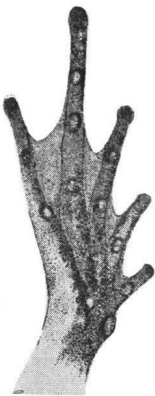


Fig. 5 Hind-limb.

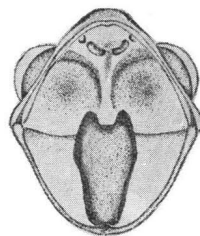
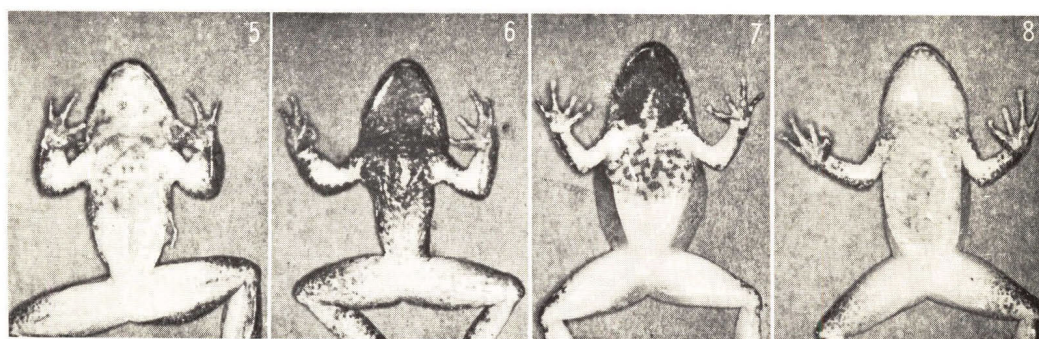
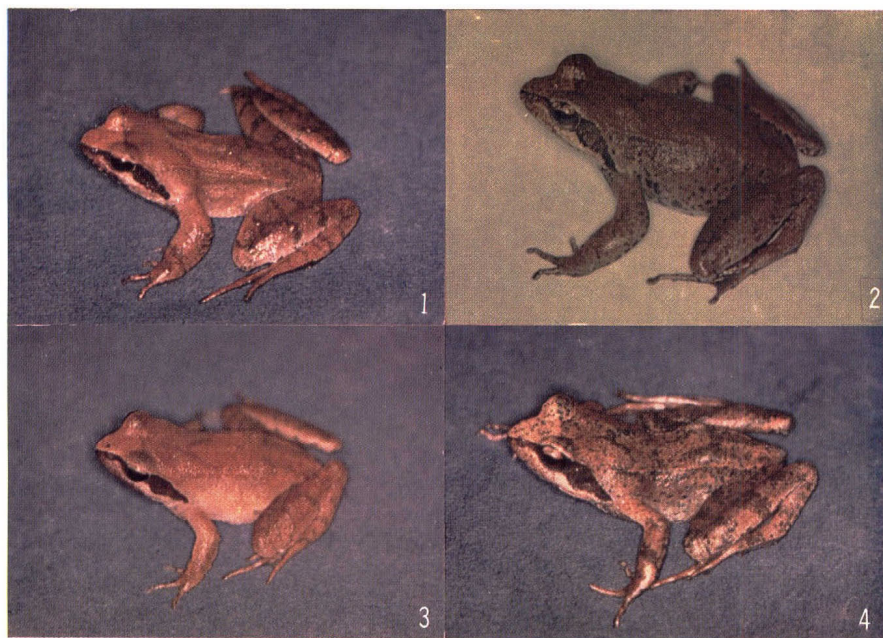


Fig. 6 Interior of mouth, showing position of vomerine teeth and inner-nostril.

Anbo, Yakushima, Kagoshima Prefecture. The breeding season occurs from the end of January to April. It makes a group of 20-30 individuals in a spring of underground water. It spawns an egg-mass consisting of 92-108 eggs; the egg is somewhat small and dark in color, with large quantity of yolkmass. It deposits the egg-mass in the deep of underground water pool. After spawning, it spreads into a shadowy grass ground or pebbly ground. The tadpole has a very longer tail than that of *Rana tagoi*, but shorter head and trunk.

Remarks: The present new subspecies somewhat resembles *Rana tagoi* but differs from it by the following characters. In *Rana tagoi*, the head is rather broad and the snout is rounded and shorter; the distance from the end of snout to the anterior margin of eye somewhat shorter than the interorbital space. Vomerine tooth plate has three small teeth instead of four in this subspecies. In *Rana tagoi*, the dorso-lateral fold slender but distinct, curved outwards at the postero-lateral side of tympanum and heels overlapping when they are folded at right angles to the body. The inner metatarsal tubercles somewhat large, elliptical; the outer metatarsal tubercles small, but distinct. Omosternum small fan-shaped; xiphisternum nearly crescentic, without invagination on the middle of lower margin.

The present subspecies has nearly the same habits as that of *Rana tagoi*, but the outer features are somewhat different as mentioned above.



1. *R. tagoi* ♂.      2. *R. t. yakushimensis* ♂.  
 3. *R. tagoi* ♀.      4. *R. t. yakushimensis* ♀.  
 5. *R. tagoi* ♂, ventral view.      6. *R. t. yakushimensis* ♂, ventral view.  
 7. *R. tagoi* ♀, ventral view.      8. *R. t. yakushimensis* ♀, ventral view.